

**Classics of Mathematics.** Edited by Ronald Calinger. Oak Park, Illinois (Moore Publishing Company). 1982. xxv + 742 pp. \$18.00 (paper).

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*Mathematics is a science with no past and no future.*

Readers of this journal will reject this assertion instinctively, but those who teach mathematics to undergraduates will agree after a little reflection that there is more than a grain of practical truth to it.

It has always been true that few students in university classes understand that mathematics is a living and prospering science. Fewer yet of the students coming to these classes from the shambles that is the legacy of the New Math comprehend that mathematics has always been practiced by human beings who create mathematics by trial and error, making mistakes in judgment and refining notions of correctness and rigor as weaknesses in earlier standards become apparent.

Instructors who believe that mathematics deserves study as a major component of human intellectual history are fighting a rearguard action. They are slowly being crushed by inexorable forces: more of the limited time must be committed to filling in the technical gaps left by deficient earlier instruction and, at many schools, the amount of contact time with each student is shrinking. Nevertheless, even in precalculus and calculus courses, there remain instructors who believe that the teaching of mathematics must involve more than instilling the mechanics of formula-juggling. They need help. Ronald Calinger's *Classics of Mathematics* joins the sparse choices available for these instructors seeking a suitably inspirational book for their inquisitive students.

Not intended as a history of mathematics, *Classics of Mathematics* falls into the category of source books of mathematical writings, of which the most convenient in English for the general reader are those in the series published by Harvard University Press. In this book, Calinger has chosen notable passages from the earliest times through the 20th century. He has added many short essays to set the mathematical works into socio-politico-historical context, and a perusal of these pages alone would go far toward convincing a doubting student that mathematics, far from being transcribed from graven tablets, is the product of human intellectual struggle.

The book's selections, ranging as they do over many millenia, vary wildly in prerequisites and sophistication. Calinger does not annotate the individual items in the depth that Dirk Struik (editor of [Struik 1969]) does, but this serves to make Calinger's and Struik's books more complementary than competitive. Some of Calinger's excerpts use unexplained notations, but the instances I noticed were in articles of such sophistication that those attracted to them should be able to find their way past such minor annoyances.

The price of this book is right. A few copies in a departmental or school library would furnish a handy and helpful resource for undergraduates, especially lower-division students or those taking beginning courses. *Classics of Mathematics* would also be a good supplement to the standard history textbooks, offering translations of interesting source texts which in original form are mostly inaccessible to students.

#### REFERENCE

Struik, D. J., 1969. *A source book in mathematics, 1200–1800*. Cambridge, Mass.: Harvard Univ. Press.